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ABSTRACT

To determine student attitudes toward traditional and individualized instruction, 152 students (92 males, 60 females) selected from the postsecondary instructional areas of agriculture, business, home economics, and trades and industry were surveyed for their opinions. The students responded to 25 statements about each type of instruction saying whether they strongly disagreed, disagreed, were uncertain, agreed, or strongly agreed with each statement. Findings indicate that students prefer individualized over traditional instruction, but they have favorable attitudes toward both methods suggesting that both types of instruction are needed. The survey instrument is appended. (MU)

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FINAL REPORT

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A COMPARATIVE ANALYSIS OF STUDENT ATTITUDES TOWARD INDIVIDUALIZED
AND TRADITIONAL INSTRUCTION

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Southwest Wisconsin Vocational-Technical Institute
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SUMMARY

The research project was conducted to determine student attitudes toward individual and traditional instruction.

Surveys were given to one hundred fifty-two (152) students selected from the instructional areas of Agriculture, Business, Home Economics and Trades and Industry. Among the one hundred fifty-two (152) students were ninety-two (92) males and sixty (60) females. They completed the surveys which consisted of fifty (50) statements, twenty-five (25) on individual instruction and twenty-five (25) on traditional instruction. They responded to each statement by marking the response closest to how they felt about the statement, strongly disagree, disagree, uncertain, agree, or strongly agree.

After all the data from the surveys had been collected, tables were prepared which summarized the results of the survey showing the percentage of students answering strongly disagree, disagree, uncertain, agree, or strongly agree, to each question. There are tables for individual and traditional instruction and also for the responses made by the males and females on individual and traditional instruction.

The information obtained from the survey indicates that students do prefer individual over traditional instruction, but the responses were favorable for both types of instruction.

CHAPTER I

BACKGROUND FOR THE STUDY

A review of literature provides many definitions and explanations of individualized instruction. It has been characterized as a highly flexible system of multiple materials and procedures in which the student is given substantial responsibility for planning and carrying out his own organized program of studies, with the assistance of his teachers, and in which his progress is determined solely in terms of those plans. It has also been explained as non-graded instruction, enabling each student to go as far in each subject as his ability permits while careful records are kept on each student's progress.

The traditional form of instruction in which all pupils are taught the same skill or concept simultaneously is eliminated, and pupils progress at a self-determined pace, often on self-selected subjects, to achieve self-evaluated and self-satisfying goals.

At the Southwest Wisconsin Vocational-Technical Institute individualized instruction is used in the following four forms:

1. Student to teacher on a one to one basis in a lab situation with the use of a text.
2. Packaged, completely programmed instruction, the student works at his own pace in an open lab using a programmed textbook. Completely individualized.
3. Combination of the first two. The student works at his own pace using a programmed text in a lab with the assistance of the instructor.

4. The student may meet with his instructor on a one to one basis using a student performance evaluation form developed by the instructor.

The concept of individualized learning dates back to about 1900. In 1919 the public schools of Winnetka, Illinois implemented the Winnetka Plan, a non-graded approach in which each student was given a course of study for each subject and provision was made for continuous-progress promotion. The Dalton, Massachusetts high school implemented the Dalton Plan in 1920 where students were given a series of subjects to learn within a given block of time but were free to pace themselves through each subject.

A review of literature found the following studies which were done to investigate the effects of different methods of instruction.

Ashmus and Haigh (1952) reported that almost an equal number of students preferred directive as non-directive classes and that while students did not differ significantly in intelligence or grade averages, those preferring non-directive courses displayed greater flexibility, insight, and ability to cope with ambiguity (1). Macomber and Siegel (1956) found a small superiority in achievement for students who initially held favorable attitudes to a mode of instruction (12).

Among the more recent research was Smith (1962) who did a study teaching elementary statistics where students using a programmed text indicated that they enjoyed the material, but less than 60% preferred it over conventional learning and though they learned with less effort (18). Carpenter and Greenhill (1963) presented Algebra at four different rates. The results were that the variation of pace produced no significant differential effects

with respect to attitude toward method of instruction (3). Eigen and Feldhusen (1964) found that students attitude toward programmed instruction were not generally related to their success in learning (6) and a study by Siegel and Siegel (1965) suggests that learners with certain cognitive styles are either facilitated or hampered by the particular teaching method to which they are exposed (17).

Kropp, Nelson, and King (1967) concluded that achievement can be enhanced by assigning instructional materials known to be related to ability patterns of students (10).

Jioia (1972) at Moraine Valley Community College did a study on Sociology classes and found that students do not want a completely free and independent learning situation, but they did favor the individualized course because they could work at their own pace and could receive immediate gratification for their work. However, they pointed out two positive aspects of traditional instruction they missed. They felt that individualization caused them to lose their identity as a class and they missed the traditional classroom discussion (9).

Dunn and Dunn (1972) said that individualizing instruction should focus the emphasis of the instructional process on each individual student - his skills, abilities, interests, learning styles, motivation, goals, etc. should all be assessed when diagnosing learning activities for an individual (5).

Connolly and Sepe (1973) concluded that there is no one preferred method of instruction. The most prominent reason given for selecting the self-instructional model was the self-pacing characteristic. The most frequent reason for the traditional instructional model was group emphasis. They also found no significant relationship between common demographic and academic characteristics of students and their preference (16).

All of these research studies have been related to different aspects of instructional methods of education at the high school and college levels.

The following three studies relate specifically to vocational education. One carried out by Finch of Pennsylvania State University measured student attitude toward instruction. A group of auto mechanics students were randomly assigned to two treatments. Thirteen students worked on automobiles in the shop and fifteen students studied textbooks at their desks. The results were that the shop treatment was favored significantly (7). A study by Lambrecht (1972) found that students were judged to have responded more favorably to the individualized instructional situations than did teachers (11). The third study entitled, Student Survey Learning Styles Project, headed by Arban J. Oen at Fox Valley Technical Institute (June, 1973) found that individualized instruction has a definite role and place at FVTI and that the vast majority of FVTI students have a good attitude toward individualized instruction (14).

These research findings indicate that some progress has been made in the study of student attitude as related to individualized instruction. There have been results that there is no significant difference with attitudes toward individualized and traditional instruction; some findings have indicated a slight difference; very few have shown a significant difference. There is an obvious lack of relevant research in vocational and technical education which suggests that there is a need for more investigation in this area, as conclusions can not be drawn from such a small number of significant investigations.

Difficulty has been encountered in developing instruments to accurately measure student attitude as Moss (1967) indicated that important problems are

usually complex and become persistent because we lack the tools-the research techniques and instruments necessary to solve them (13). A review of attitude measurement literature failed to identify an existing instrument which could be utilized for these purposes of assessing student attitude.

Some evidence is provided in these studies which is in support of Bloom (1968) in his belief that individual students may need very different types and quantities of instruction to achieve mastery (2).

CHAPTER II

INTRODUCTION

THE PROBLEM:

As previously stated, the concept of individualized learning is not a recent innovation, but rather an accepted instructional method dating back over forty years. R. W. Selvidge's book published during the decade of the thirties entitled, Individual Instruction Sheets, presented the concept of individualized learning packages (15). However, even though it has been used for many years, the recent development and wide spread prolific use of self-instruction materials demands close attention. A study published by the University of Wisconsin in cooperation with the Wisconsin Board of Vocational, Technical and Adult Education entitled, "An Assessment of Current and Projected Individualized Instruction in Business and Marketing Courses", provides interesting data. The study indicates that as of 1972, twelve of the then eighteen vocational districts reported using individualized instruction. The other districts planned upon introducing individualized methods in the near future. The reaction of the educational community in the nation, has been mixed in acceptance. Positions have been taken which both defend and attack the effectiveness of self instruction and individualized instruction. Research Journals and studies reflect the controversy expressing both viewpoints on the merits of traditional and individualized instruction. The emphasis of research has been on adaptation of traditional instruction to individualized instruction.

The student should receive equal attention by the researcher as it is he who must make significant changes. In the past the student was a receiver of

information who passively participated in the learning process. The instructor provided all information for the student to assimilate. Under the individualized self-paced learning process, the student is required to be an active participant in the process. He is required to work semi-independently with the instructor acting as a facilitator of learning.

Since the students learning process is a prime objective, an apparent lack of concern for student evaluation and opinion prompted this investigation.

The problem was ascertained by the District's inability to secure relevant objective information on a regional basis to allow assessment of non-traditional and traditional instruction in post-secondary vocational, technical education.

THE OBJECTIVES OF THE STUDY:

1. Definition of objectives.

- a. To determine if students prefer traditional instruction or self-paced individualized instruction as a prime facilitator to the learning process.
- b. To determine if student preferences are sufficiently in agreement with other research to warrant the offering of a single mode of instruction.
- c. To determine what characteristics of the student respondents are significant when comparing the students who prefer traditional instruction with students who select self paced learning.

2. Definitions, assumptions, etc.

It is assumed that the tabulation of resultant survey responses will enable the accumulation of specific information suitable for analysis which will allow the objectives to be obtained. The primary assumption is that the survey response will be complete enough to provide justifiable data relative to traditional and non-traditional education.

2.1

CHAPTER III

METHODOLOGY

A survey instrument was prepared by the researcher during the month of February, 1974 to survey the students on their attitudes toward individual and traditional instruction. The survey was constructed by reviewing the literature and using the information from previous surveys utilized in other studies and from comments ascertained by the personal interview technique from instructors at the Southwest Wisconsin Vocational-Technical Institute. The instrument is shown in Appendix A.

A pretest of the survey was conducted during the last week of February where 10 students participated. Following review of the data, plans were established to proceed and complete the administration of the survey.

During the month of March, 1974, 152 students were surveyed in 13 classes. The classes were selected in 9 different vocational, technical programs. A listing of the classes is in Appendix B.

The instructor of each class to be surveyed was contacted to determine the time and place for each survey to be administered. See Appendix C for the survey schedule.

When the survey was administered, the instrument was introduced to the students explaining the purpose of the survey and defining individual and traditional instruction. The introduction is contained in Appendix D.

CHAPTER IV

FINDINGS AND ANALYSIS

One hundred fifty-two surveys were completed by students, 92 males, and 60 females. The surveys were given in the following programs:

| | |
|--------------------|---|
| Business - | 60 students |
| | 17 from Secretarial Science II |
| | 11 from Business Machines II |
| | 14 from Transcribing Machines |
| | 18 from Open Lab - AVT Typing |
| Agriculture - | 35 students |
| | 19 from Ag. Mechanics - Engines Lab |
| | Ag. Mechanics - Tractor Lab |
| | 16 from Ag. Buildings - Buildings Practice II |
| Home Economics - | 14 students |
| | 5 from Home Furnishings Assistant backgrounds |
| | 9 from Food Prep. Assistant II - Prep. & Serv. Quant. |
| Trade & Industry - | 43 students |
| | 15 from Auto Body Lab II |
| | 12 from Auto Body Lab II |
| | 6 from Welding Theory II |
| | 10 from Mechanical Drafting |

"t" tests were completed on individual and traditional instruction, males and females on individual instruction, and a comparison of males and females on traditional instruction.

The "t" tests were done by using the following formula from Downie and Heath's Basic Statistical Methods (4):

$$\widetilde{Z} = \frac{\bar{X}_1 - \bar{X}_2}{S_{D_X}}$$

The following values were assigned to the statements:

| | |
|--------|--------|
| SA = 1 | SA = 5 |
| A = 2 | A = 4 |
| U = 3 | U = 3 |
| D = 4 | D = 2 |
| SD = 5 | SD = 1 |

The value of one is negative and the value of five is positive.

TABLE A

| | Mean | Variance | Standard Deviation | T |
|-------|--------|----------|--------------------|--------|
| I. I. | 3.6844 | .1078 | .328329 | 6.5556 |
| T. I. | 3.0944 | .0945 | .3074 | |

On the One Tail Table at the 5% level of confidence and 24 degrees of freedom, a value of 1.711 is needed to be significant. The T value was found to be 6.5556, therefore, the conclusion can be made that the students do have a more positive attitude toward individualized instruction than toward traditional instruction.

TABLE B

| | Mean | Variance | Standard Deviation | T |
|---------|-------|----------|--------------------|-------|
| Males | 3.702 | .1271 | .3565 | .6458 |
| Females | 3.64 | .1042 | .3228 | |

Here a value of 2.064 is needed at the 5% level of confidence and 24 degrees of freedom on the Two Tail Table to be significant. The T value was found to be .6458 and is not significant; there is no significant difference between male and female attitudes toward individual instruction.

TABLE C

| | Mean | Variance | Standard Deviation | T |
|---------|-------|----------|--------------------|--------|
| Males | 3.026 | .0565 | .0032 | 2.5203 |
| Females | 3.25 | .0689 | .0047 | |

Again at the 5% confidence level and 24 degrees of freedom on the Two Tail Table, a value of 2.064 is needed to be significant. The T value was

found to be 2.5203 and is significant. It can be concluded that females have more of a positive attitudes toward traditional instruction than do males.

The "t" tables which were used here were obtained from Hays', Statistics for Psychologists (8).

The following tables illustrate the percentages of students answering each question strongly disagree, disagree, uncertain, agree, and strongly agree.

The tables provide a comparison for individual and traditional instruction and also for percentages of males and females responding to each question on individual and traditional instruction.

TABLE I
ATTITUDES IN REGARD TO MOTIVATION

| | SD | D | U | A | SA |
|---|------|------|------|------|------|
| 1. Individualized assignments encourage students to do less work than do traditional classroom assignments. | 29.8 | 41.8 | 12.7 | 12.7 | 2.9 |
| 2. Traditional assignments encourage students to do more work than do individualized assignments. | 9.2 | 38.5 | 23.0 | 26.2 | 3.1 |
| 3. While taking individualized instruction, I feel challenged to do my best work. | 2.2 | 9.7 | 5.9 | 62.9 | 19.3 |
| 4. While taking traditional instruction, I feel challenged to do my best work. | 3.8 | 28.5 | 16.2 | 47.7 | 3.8 |
| 5. I become easily discouraged with the individualized type of instruction. | 16.5 | 55.9 | 16.5 | 8.2 | 2.9 |
| 6. I become easily discouraged with the traditional form of instruction. | 5.4 | 43.8 | 18.5 | 28.5 | 3.8 |
| 7. I want to work harder when taking individualized instruction. | 2.2 | 11.1 | 17.1 | 61.5 | 8.1 |
| 8. The traditional method of instruction makes me want to work harder. | 6.0 | 39.8 | 28.6 | 23.3 | 2.3 |
| 9. Individualized instruction makes me feel that I want to do my best work. | .7 | 8.2 | 11.9 | 65.9 | 13.3 |
| 10. While taking traditional instruction, I feel that I want to do my best work. | 1.4 | 23.7 | 20.1 | 50.4 | 4.3 |
| 11. One will work harder if he is studying a subject with a large group. | 6.2 | 41.1 | 31.0 | 18.6 | 3.1 |

The first table illustrates student attitude toward motivation in different learning styles. The respondents indicated that individualized assignments encourage students to do more work than do traditional assignments. Eighty-two point two percent (82.2%) of the respondents said they were challenged to do their best work in individualized instruction while only 51.5% said they were challenged to do their best work in traditional instruction.

There were more students who said they became discouraged with traditional instruction than with individual instruction. Sixty-nine point six percent (69.6%) of the respondents said they wanted to work harder in individual instruction and only 25.6% said they wanted to work harder in traditional instruction.

Seventy-nine point two percent (79.2%) said they wanted to do their best work in individual instruction while only 54.7% wanted to do their best work in traditional instruction. The respondents indicated that they would not work harder by studying a subject with a large group.

TABLE II

ATTITUDES IN REGARD TO FEELINGS OF SECURITY

| | SD | D | U | A | SA |
|---|------|------|------|------|-----|
| 1. Individualized instruction makes me feel isolated and alone. | 20.0 | 63.7 | 10.4 | 4.4 | 1.5 |
| 2. I feel that no one really cares whether I work or not in individualized instruction. | 25.9 | 54.8 | 12.6 | 3.7 | 2.9 |
| 3. In traditional instruction I feel that no one really cares whether I work or not. | 7.7 | 46.2 | 20.7 | 20.0 | 5.4 |
| 4. In individualized instruction, the material makes me feel at ease. | 2.9 | 14.1 | 27.4 | 46.7 | 8.9 |
| 5. While taking traditional instruction I feel very uneasy. | 4.6 | 56.9 | 18.5 | 18.5 | 1.5 |
| 6. I feel frustrated by the individualized instructional situation. | 33.3 | 42.2 | 13.3 | 8.2 | 2.9 |
| 7. I usually feel frustrated by the traditional instructional situation. | 3.9 | 45.7 | 20.9 | 23.3 | 6.2 |
| 8. I usually feel uncertain as to my performance in individualized instruction. | 6.7 | 49.3 | 19.4 | 18.6 | 5.9 |
| 9. In the traditional classroom I feel that I am always certain of my performance. | 3.1 | 40.0 | 28.5 | 25.4 | 3.1 |

Table II illustrates student attitudes in regard to feelings of security with different learning styles. The respondents indicated that they did not feel isolated and alone with individualized instruction. A greater percentage of the students disagreed that no one cared whether they worked or not in individual instruction than they did in traditional instruction.

More respondents said they were frustrated by traditional instruction than by individual instruction. The respondents also indicated that individual

instruction makes them feel at ease. More students feel certain of their performance in individual instruction than in traditional instruction.

TABLE III

ATTITUDES TOWARD CHARACTERISTICS IN TYPES OF INSTRUCTION

| | SD | D | U | A | SA |
|--|------|------|------|------|------|
| 1. I receive more individual help in individualized courses than in non-individualized courses. | 2.2 | 11.8 | 19.3 | 51.1 | 15.6 |
| 2. I feel that I receive more individual help in traditional courses than in individualized courses. | 13.1 | 46.2 | 25.4 | 13.8 | 1.5 |
| 3. There is usually enough time to learn the materials that are presented in individualized instruction. | 3.7 | 14.2 | 20.9 | 54.5 | 6.7 |
| 4. In view of the time allowed for learning in traditional instruction I feel that too much material is presented. | 4.7 | 36.7 | 25.0 | 31.3 | 2.3 |
| 5. Individualized instruction makes learning too mechanical. | 9.6 | 64.4 | 16.3 | 8.2 | 1.5 |
| 6. Teacher help is not always available in individualized instruction. | 9.6 | 37.8 | 15.6 | 33.3 | 3.7 |
| 7. In traditional instruction, I find that teacher help is almost always available. | 3.9 | 29.2 | 13.8 | 49.2 | 3.9 |
| 8. A lot of cheating takes place in individualized instruction. | 28.2 | 45.9 | 16.3 | 5.9 | 3.7 |
| 9. A lot of cheating takes place with traditional instruction. | 4.6 | 28.5 | 22.3 | 39.2 | 5.4 |
| 10. Through individualized learning the teacher has more time to give to the individual needs of the students. | 2.9 | 8.9 | 7.5 | 61.2 | 19.4 |

The third table illustrates student attitudes toward the characteristics of types of instruction. It was indicated that more individual help is received in individual courses and the instructor has more time to give to the individual needs of the students. The respondents also indicated that more cheating takes place in traditional instruction.

The students felt that individual instruction did not make learning too mechanical; and they also stated there was more time to learn the materials presented in individualized instruction.

TABLE IV

ATTITUDES TOWARD VALUE OR EFFECTIVENESS OF INSTRUCTIONAL METHODS

| | SD | D | U | A | SA |
|---|------|------|------|------|------|
| 1. Students may learn less with individualized instruction if they are given the option to choose "what" and "how much" they study. | 5.9 | 23.8 | 20.2 | 42.5 | 7.5 |
| 2. Most of the material presented in individualized instruction is of much value to me. | 3.7 | 2.9 | 6.7 | 60.7 | 25.9 |
| 3. The material presented in traditional instruction is not of much value to me. | 7.0 | 56.3 | 22.7 | 10.9 | 3.1 |
| 4. Very little of the material which I learn in traditional instruction can be applied to a practical situation. | 20.8 | 44.6 | 16.2 | 16.9 | 1.5 |
| 5. Individualized learning should result in a better education for most students. | 3.7 | 5.2 | 11.2 | 54.5 | 25.4 |
| 6. Traditional learning should result in a better education for most students. | 7.7 | 23.8 | 40.0 | 23.8 | 4.6 |
| 7. Students should achieve a better understanding of the subject via individualized instruction. | 1.5 | 6.7 | 17.9 | 63.4 | 10.5 |
| 8. Students should achieve a better understanding of the subject with traditional instruction. | 7.1 | 35.7 | 21.5 | 32.1 | 3.6 |

Table IV illustrates student attitudes toward the value or effectiveness of instructional methods.

The respondents indicated that individual more than traditional instruction should result in a better education for most students and that the material presented in individual instruction is of great value to them. The students also agreed that they should achieve a better understanding of the subject using individualized instruction.

TABLE V
ATTITUDES AND FEELINGS TOWARD METHODS OF INSTRUCTION

| | SD | D | U | A | SA |
|--|------|------|------|------|------|
| 1. I dislike being taught by the individual method of instruction. | 38.1 | 54.5 | 2.2 | 2.2 | 2.9 |
| 2. I dislike being taught by the traditional instructional method. | 6.9 | 43.1 | 22.3 | 23.8 | 3.9 |
| 3. Traditional instruction is very boring. | 6.2 | 36.9 | 23.8 | 23.8 | 9.2 |
| 4. Traditional instruction, I feel, is a very poor way to learn the materials. | 8.5 | 46.2 | 23.0 | 17.7 | 4.6 |
| 5. It is enjoyable to study subjects on one's own. | 2.2 | 9.6 | 19.3 | 59.3 | 9.6 |
| 6. It is more enjoyable to study subjects in a large group than on one's own. | 6.2 | 24.0 | 27.1 | 39.5 | 3.1 |
| 7. I would like more instruction presented by the individualized instructional method. | 2.2 | 9.6 | 31.1 | 46.6 | 10.4 |

In table V the student attitudes toward methods of instruction are illustrated.

They agreed that it was enjoyable to study subjects on one's own and they liked being taught by the individual instructional method. They also indicated that they would like more instruction presented by the individualized instructional method.

TABLE VI

ATTITUDES TOWARD THE MATERIAL & ABILITY TO PERFORM IN TYPES OF INSTRUCTION

| | SD | D | U | A | SA |
|---|------|------|------|------|-----|
| 1. I have difficulty reading the written material used in individualized instruction. | 18.6 | 62.7 | 12.7 | 4.5 | 1.5 |
| 2. I have difficulty reading the material used in traditional instruction. | 7.8 | 63.6 | 13.9 | 13.9 | .8 |
| 3. I feel that I am more involved with using equipment than with understanding the material in individualized instruction. | 5.9 | 35.6 | 22.9 | 26.7 | 8.9 |
| 4. In the traditional classroom situation I feel I am more involved with understanding material than wasting my time using equipment. | 10.0 | 45.4 | 19.2 | 23.1 | 2.3 |
| 5. I usually perform better when I attend group instruction and compete with fellow students. | 6.2 | 29.2 | 26.2 | 35.4 | 3.0 |

Table VI provides the student attitudes toward the material and the ability to perform in types of instruction.

They indicated that they did not have difficulty reading the written material in either type of instruction. Forty-one point five (41.5%) percent said they were not more involved with using equipment than with understanding the material in individual instruction and 55.4% said they felt they were not more involved with understanding material than with using equipment in traditional instruction.

TABLE VII

MALE & FEMALE ATTITUDES IN REGARD TO MOTIVATION

| | SD | | D | | U | | A | | SA | |
|---|------|------|------|------|------|------|------|------|------|------|
| | M | F | M | F | M | F | M | F | M | F |
| 1. Individualized assignments encourage students to do less work than do traditional classroom assignments. | 30.4 | 29.2 | 41.3 | 37.5 | 14.1 | 14.6 | 10.9 | 16.6 | 3.3 | 2.1 |
| 2. Traditional assignments encourage students to do more work than do individualized assignments. | 9.8 | 5.1 | 42.4 | 37.3 | 23.9 | 20.3 | 22.8 | 32.2 | 1.1 | 5.1 |
| 3. While taking individualized instruction, I feel challenged to do my best work. | 1.1 | 3.4 | 7.6 | 11.8 | 5.4 | 8.5 | 64.1 | 61.0 | 21.7 | 15.3 |
| 4. While taking traditional instruction, I feel challenged to do my best work. | 3.3 | 3.4 | 34.7 | 20.3 | 18.5 | 15.3 | 39.1 | 55.9 | 4.3 | 5.1 |
| 5. I become easily discouraged with the individualized type of instruction. | 15.4 | 13.6 | 59.3 | 55.9 | 15.4 | 18.6 | 8.8 | 6.7 | 1.1 | 5.1 |
| 6. I become easily discouraged with the traditional form of instruction. | 6.5 | 3.4 | 41.3 | 52.5 | 15.2 | 20.3 | 34.7 | 18.6 | 2.2 | 5.1 |
| 7. I want to work harder when taking individualized instruction. | 1.2 | 3.4 | 9.4 | 16.9 | 15.3 | 23.7 | 65.8 | 49.2 | 8.2 | 6.7 |
| 8. The traditional method of instruction makes me want to work harder. | 7.6 | 3.4 | 42.4 | 30.5 | 31.5 | 22.1 | 17.4 | 40.6 | 1.1 | 3.4 |
| 9. Individualized instruction makes me feel that I want to do my best work. | X | 1.7 | 5.4 | 11.8 | 9.8 | 18.6 | 69.6 | 57.6 | 15.2 | 10.2 |
| 10. While taking traditional instruction I feel that I want to do my best work. | 1.1 | 1.7 | 32.6 | 15.8 | 20.6 | 22.8 | 41.3 | 54.4 | 4.3 | 5.3 |
| 11. One will work harder if he is studying a subject with a large group. | 4.3 | 7.0 | 44.6 | 35.1 | 29.3 | 35.1 | 16.3 | 21.1 | 5.4 | 1.7 |

Table VII illustrates male and female attitudes in regard to motivation. Sixty-one percent (61%) of the females indicated that while taking traditional instruction they felt challenged to do their best work, while only 43.4% of the males said they felt challenged to do their best work while taking traditional instruction.

Thirty-six point nine percent (36.9%) of the males felt they became discouraged with the traditional form of instruction as opposed to 23.7% of the females.

Seventy-four percent (74%) of the males said they wanted to work harder when taking individualized instruction. Fifty-five point nine percent (55.9%) of the females felt they wanted to work harder when taking individualized instruction.

Forty-four percent (44%) of the females also said the traditional method of instruction makes them want to work harder while only 18.5% of the males indicated that they wanted to work harder with traditional instruction.

Eighty-four point eight percent (84.8%) of the males indicated that individualized instruction makes them feel they want to do their best work as opposed to 67.8% of the females indicating that they want to do their best work with individualized instruction.

Fifty-nine point seven percent (59.7%) of the females also want to do their best work while taking traditional instruction, and only 45.6% of the males felt that while taking traditional instruction they want to do their best work.

TABLE VIII

MALE & FEMALE ATTITUDES TOWARD THE MATERIAL & ABILITY TO PERFORM IN TYPES OF INSTRUCTION

| | SD | | D | | U | | A | | SA | |
|---|------|------|------|------|------|------|------|------|-----|-----|
| | M | F | M | F | M | F | M | F | M | F |
| 1. I have difficulty reading the written material used in individualized instruction. | 14.1 | 20.7 | 66.3 | 55.2 | 13.0 | 18.9 | 5.4 | 3.4 | 1.1 | 1.7 |
| 2. I have difficulty reading the material used in traditional instruction. | 6.5 | 10.3 | 60.8 | 67.2 | 13.0 | 17.2 | 19.6 | 3.4 | X | 1.7 |
| 3. I feel that I am more involved with using equipment than with understanding the material in individualized instruction. | 5.4 | 5.1 | 32.6 | 42.4 | 20.6 | 25.4 | 32.6 | 20.3 | 8.7 | 6.7 |
| 4. In the traditional classroom situation I feel I am more involved with understanding material than wasting my time using equipment. | 9.7 | 8.5 | 45.6 | 42.4 | 18.5 | 27.1 | 22.8 | 22.0 | 3.3 | X |
| 5. I usually perform better when I attend group instruction and compete with fellow students. | 7.6 | 1.7 | 32.6 | 23.7 | 22.8 | 32.2 | 34.7 | 38.9 | 2.2 | 3.4 |

Table no. VIII illustrates the male and female attitudes toward the material and ability to perform in different methods of instruction.

The females indicated they did not have difficulty reading the material in either type of instruction; the males felt they had no difficulty reading the material in individual instruction and 19.6% of the males said they had difficulty reading the material in traditional instruction.

Both males and females reported that in the traditional classroom situation they were not more involved with understanding material than with using equipment.

Forty point two percent (40.2%) of the males indicated that they did not perform better when they attended group instruction and competed with fellow students, while only 25.4% of the female students felt this way.

In Table IX, male and female attitudes and feelings toward methods of instruction are illustrated. Both males and females indicated they liked being taught by the individual method of instruction.

Thirty point five percent (30.5%) of the males said they disliked being taught by the traditional method of instruction; only 18.6% of the females stated they disliked being taught by the traditional method of instruction.

Thirty-six point nine percent (36.9%) of the males and 24.2% of the females thought that traditional instruction is very boring. Twenty-six percent (26%) of the males and 12% of the females said that traditional instruction is a very inadequate way to learn.

Both males and females reported it was enjoyable to study subjects independently. They also both agreed they would prefer more instruction presented by the individualized instruction method.

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TABLE IX

MALE & FEMALE ATTITUDES AND FEELINGS TOWARD METHODS OF INSTRUCTION

| | | SD | | D | | U | | A | | SA | |
|----|---|------|------|------|------|------|------|------|------|------|------|
| | | M | F | M | F | M | F | M | F | M | F |
| 1. | I dislike being taught by the individual method of instruction. | 37.8 | 28.8 | 56.7 | 59.3 | 2.2 | 3.4 | 2.2 | 3.4 | 1.1 | 5.1 |
| 2. | I dislike being taught by the traditional instructional method. | 4.3 | 10.2 | 41.3 | 49.2 | 23.9 | 22.0 | 28.3 | 13.5 | 2.2 | 5.1 |
| 3. | Traditional instruction is very boring. | 5.4 | 8.6 | 33.7 | 44.8 | 23.9 | 22.4 | 30.4 | 12.1 | 6.5 | 12.1 |
| 4. | Traditional instruction, I feel, is a very poor way to learn the materials. | 6.5 | 12.1 | 41.3 | 55.2 | 26.1 | 20.7 | 20.6 | 10.3 | 5.4 | 1.7 |
| 5. | It is enjoyable to study subjects on one's own. | 1.1 | 3.4 | 10.8 | 10.3 | 21.7 | 12.1 | 56.5 | 65.5 | 9.8 | 8.6 |
| 6. | It is more enjoyable to study subjects in a large group than on one's own. | 6.5 | 3.5 | 27.9 | 19.3 | 24.7 | 28.1 | 38.7 | 40.4 | 2.2 | 8.7 |
| 7. | I would like more instruction presented by the individualized instructional method. | 1.1 | 3.4 | 7.4 | 10.2 | 29.7 | 33.8 | 50.0 | 47.5 | 11.7 | 5.1 |

TABLE X

MALE & FEMALE ATTITUDES TOWARD VALUE OR EFFECTIVENESS OF INSTRUCTIONAL METHODS

| | SD | | D | | U | | A | | SA | |
|---|------|------|------|------|------|------|------|------|------|------|
| | M | F | M | F | M | F | M | F | M | F |
| 1. Students may learn less with individualized instruction if they are given the option to choose "what" and "how much" they study. | 6.9 | 3.4 | 29.1 | 18.6 | 19.8 | 22.1 | 38.4 | 45.7 | 5.8 | 10.2 |
| 2. Most of the material presented in individualized instruction is of much value to me. | 3.3 | 3.4 | 2.2 | 3.4 | 6.5 | 5.1 | 58.7 | 71.2 | 29.3 | 16.9 |
| 3. The material presented in traditional instruction is not of much value to me. | 5.5 | 13.8 | 52.7 | 65.5 | 26.4 | 12.1 | 12.1 | 6.9 | 3.3 | 1.7 |
| 4. Very little of the material which I learn in traditional instruction can be applied to a practical situation. | 18.5 | 22.0 | 42.4 | 52.5 | 17.4 | 15.3 | 20.6 | 8.5 | 1.1 | 1.7 |
| 5. Individualized learning should result in a better education for most students. | 3.3 | 3.4 | 5.5 | 3.4 | 6.6 | 18.6 | 52.7 | 62.7 | 31.8 | 11.8 |
| 6. Traditional learning should result in a better education for most students. | 6.3 | 8.7 | 28.1 | 14.0 | 44.7 | 40.4 | 14.6 | 36.8 | 6.3 | X |
| 7. Students should achieve a better understanding of the subject via individualized instruction. | 1.1 | 1.7 | 6.5 | 5.2 | 13.0 | 29.3 | 68.5 | 51.7 | 10.8 | 12.1 |
| 8. Students should achieve a better understanding of the subject with traditional instruction. | 8.7 | 3.4 | 33.7 | 27.1 | 25.0 | 30.5 | 30.4 | 33.9 | 2.2 | 5.1 |

Table X provides male and female attitudes toward value or effectiveness of instructional methods.

Eighty-eight percent (88%) of both males and females indicated that most of the material presented in individualized instruction is of much value to them.

Males and females both felt that individualized learning should result in a better education for most students.

Only 20.9% of the males responded that traditional learning should result in a better education for most students and 36.8% of the females indicated that traditional learning should result in a better education for most students.

Seventy-nine point three percent (79.3%) of the males said students should achieve a better understanding of the subject by individualized instruction, 63.8% of the females also indicated that students should achieve a better understanding of the subject by individualized instruction.

Only 32.6% of the males and 39.0% of the females said that students should achieve a better understanding of the subject with traditional instruction.

TABLE XI

MALE & FEMALE ATTITUDES TOWARD CHARACTERISTICS IN TYPES OF INSTRUCTION

| | SD | | D | | U | | A | | SA | |
|---|------|------|------|------|------|------|------|------|------|------|
| | M | F | M | F | M | F | M | F | M | F |
| 1. I receive more individual help in individualized courses than in non-individualized courses. | 1.1 | 3.4 | 10.7 | 15.3 | 16.1 | 23.7 | 58.1 | 42.4 | 13.9 | 15.3 |
| 2. I feel that I receive more individual help in traditional courses than in individualized courses. | 10.8 | 11.8 | 47.8 | 42.4 | 25.0 | 33.8 | 15.2 | 10.2 | 1.1 | 1.7 |
| 3. There is usually enough time to learn the materials that are presented in individualized instruction. | 3.3 | 3.4 | 17.6 | 8.5 | 19.7 | 23.7 | 52.7 | 59.3 | 6.6 | 5.1 |
| 4. In view of the time allowed for learning in traditional instruction, I feel that too much material is presented. | 6.2 | 1.7 | 30.8 | 32.2 | 27.2 | 35.6 | 33.3 | 28.8 | 2.5 | 1.7 |
| 5. Individualized instruction makes learning too mechanical. | 12.4 | 3.4 | 59.5 | 72.8 | 16.8 | 15.3 | 10.1 | 6.7 | 1.1 | 1.7 |
| 6. Teacher help is not always available in individualized instruction. | 5.4 | 15.3 | 31.5 | 52.5 | 16.3 | 15.3 | 42.4 | 15.3 | 4.3 | 1.7 |
| 7. In traditional instruction I find that teacher help is almost always available. | 1.1 | 6.7 | 33.7 | 22.0 | 14.1 | 20.3 | 47.8 | 47.5 | 3.3 | 3.4 |
| 8. A lot of cheating takes place in individualized instruction. | 29.3 | 18.6 | 46.7 | 47.5 | 14.1 | 25.4 | 5.4 | 6.7 | 4.3 | 1.7 |
| 9. A lot of cheating takes place with traditional instruction. | 4.3 | 4.0 | 23.9 | 36.0 | 25.0 | 32.0 | 41.3 | 24.0 | 5.4 | 4.0 |
| 10. Through individualized learning, the teacher has more time to give to the individual needs of the student. | 2.4 | 3.4 | 13.4 | 5.1 | 7.3 | 6.7 | 52.4 | 67.8 | 24.4 | 16.9 |

Table XI illustrates male and female attitudes toward characteristics in types of instruction.

Seventy-two percent (72%) of the males indicated they received more help in individualized courses than in nonindividualized courses while only 57.7% of the females thought they received more help in individualized courses.

Both males and females felt that individualized instruction did not make learning too mechanical.

Forty-six point seven percent (46.7%) of the males said that instructor help was not always available in individualized instruction; only 17% of the females said instructor help was not always available in individualized instruction.

Both males and females tended to agree that teacher help is almost always available in traditional instruction.

Males and females both disagreed that a lot of cheating takes place in individualized instruction.

Forty-six point seven percent (46.7%) of the males felt that a lot of cheating takes place with traditional instruction and only 28.0% of the females thought that a lot of cheating takes place with traditional instruction.

Males and females both indicated that through individualized learning, the instructor has more time to give to the individual needs of the students.

TABLE XII

MALE & FEMALE ATTITUDES IN REGARD TO FEELINGS OF SECURITY

| | SD | | D | | U | | A | | SA | |
|---|------|------|------|------|------|------|------|------|-----|------|
| | M | F | M | F | M | F | M | F | M | F |
| 1. Individualized instruction makes me feel isolated and alone. | 17.4 | 18.6 | 63.0 | 72.8 | 14.1 | 3.4 | 4.3 | 3.4 | 1.1 | 1.7 |
| 2. I feel that no one really cares whether I work or not in individualized instruction. | 25.0 | 23.7 | 53.2 | 59.3 | 16.3 | 8.5 | 3.3 | 5.1 | 2.2 | 3.4 |
| 3. In traditional instruction I feel that no one really cares whether I work or not. | 3.3 | 11.9 | 45.7 | 50.8 | 20.6 | 23.7 | 26.1 | 8.5 | 4.3 | 5.1 |
| 4. In individualized instruction, the material makes me feel at ease. | 3.3 | 1.7 | 16.5 | 11.8 | 31.8 | 30.5 | 38.5 | 50.8 | 9.9 | 5.1 |
| 5. While taking traditional instruction I feel very uneasy. | 4.3 | 5.1 | 52.2 | 66.1 | 21.7 | 13.6 | 19.6 | 15.3 | 2.2 | X |
| 6. I feel frustrated by the individualized instructional situation. | 31.5 | 28.8 | 45.6 | 45.7 | 10.9 | 16.9 | 10.9 | 3.4 | 1.1 | 5.1 |
| 7. I usually feel frustrated by the traditional instructional situation. | 4.3 | 1.8 | 41.3 | 54.5 | 21.7 | 29.1 | 25.0 | 12.7 | 7.6 | 1.8 |
| 8. I usually feel uncertain as to my performance in individualized instruction. | 6.5 | 5.2 | 50.0 | 44.8 | 19.6 | 22.4 | 20.6 | 15.5 | 3.3 | 12.1 |
| 9. In the traditional classroom I feel that I am always certain of my performance. | 1.1 | 6.7 | 39.1 | 42.4 | 30.4 | 27.1 | 26.1 | 22.0 | 3.3 | 1.7 |

Table XII illustrates the male and female attitudes in regard to feelings of security.

Forty-nine percent (49%) of the males disagreed that in traditional instruction no one really cares whether they work or not, while 62.7% of the females disagreed that no one really cares whether they work or not in traditional instruction.

Fifty-five point nine percent (55.9%) of the females indicated the material in individual instruction makes them feel at ease and only 48.4% of the males felt the material made them feel at ease in individual instruction.

Seventy-one point two percent (71.2%) of the females said they did not feel uneasy while taking traditional instruction as opposed to only 56.5% of the males saying they did not feel uneasy while taking traditional instruction.

Forty-five point six percent (45.6%) of the males responded that they did not feel frustrated by the traditional instructional situation; 56.3% of the females did not feel frustrated by the traditional instructional situation.

CHAPTER V

CONCLUSIONS

The major purposes of this study were (1) to determine whether students prefer traditional instruction or self paced individualized instruction as a prime facilitator to the learning process; (2) to determine whether student preferences are sufficiently in agreement with other research to warrant the offering of a single mode of instruction; (3) to determine what characteristics of the student respondents are significant when comparing the students who prefer traditional instruction with students who select self paced learning.

The findings of the study are based upon responses from 152 students, 92 males and 60 females. Two learning styles were investigated, individual and traditional; the students responded to 25 statements about each one saying whether they strongly disagreed, disagreed, were uncertain, agreed, or strongly agreed with each statement.

In summarizing the results, the statements were organized into six different categories. They included the following: attitudes in regard to motivation, attitudes in regard to feelings of security, attitudes toward characteristics of types of instruction, attitudes toward value or effectiveness of instructional methods, attitudes and feelings toward methods of instruction and attitudes toward the material and ability to perform in types of instruction.

In reviewing the tables of data which were constructed from the information obtained, the objectives of the study can now be answered. It may be concluded that students do prefer individual over traditional instruction, but they also have favorable attitudes toward both methods of instruction. This study illustrates as do other research findings that both types of instruction are needed as the students indicated favorable attitudes toward both methods of instruction. It

was found there was no significant difference between male and female attitudes toward individual instruction as they both responded very favorably to this method of instruction. A significant difference was found between male and female attitudes toward traditional instruction. It was concluded that females have more of a positive attitude toward traditional instruction than do males.

The findings in this study do produce significant results favorable to individual instruction. This indicates that the trend in contemporary education is to develop self paced individualized instruction methods and is a worthwhile movement since students do prefer this method of learning.

However, there is not enough evidence to warrant the offering of a single mode of instruction since different students or groups of students prefer divergent modes of instruction. Additional investigation is needed in this area of vocational, technical education to assist educators in development of relevant instructional methods.

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APPENDIX A

INDIVIDUALIZED INSTRUCTION RESEARCH PROJECT
STUDENT BACKGROUND INFORMATION

Name of Student _____

Course Name _____

Name of Instructor _____

Age: ☐ 17-20 ☐ 21-25 ☐ 26-30 ☐ 31-40 ☐ 41-50 ☐ over 50

Sex: ☐ Male ☐ Female

Father's Occupation: _____

Mother's Occupation: _____

Major Program of Study: _____
For example: Clerk-Typist or Retail Sales)

Please check the type of program in which you are enrolled:

- ☐ Associate Degree Program
☐ Vocational Diploma Program
☐ Program less than one year in length

Current semester of enrollment in the above program (Circle one) 1 2 3 4 5 6

Previous education:

- ☐ Some high school
☐ High school graduate
☐ Other technical school
☐ Technical graduate
☐ Other institutions _____

How many different courses are you now taking? _____

How many hours a week are you scheduled to attend classes this semester? _____

Current Employment

Name of employer and location _____
Type of work done _____
Number of hours worked per week _____

Why are you taking this course? (If more than one reason applies, mark you first reason 1, your second reason 2, etc.)

- _____ In order to get a job as soon as possible.
_____ This course would help me to do more kinds of work on my present job.
_____ To be able to advance or be promoted in my present job.
_____ General interest in this subject.
_____ This course is required as a part of the curriculum in which I am enrolled.
_____ This course is an elective I've chosen to obtain credits required in the curriculum in which I am enrolled.
_____ A friend was planning to take the course, so we are taking it together.
_____ Other (please specify) _____

INDIVIDUAL INSTRUCTION

CIRCLE YOUR RESPONSE

| | Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|----------------------|----------|-----------|-------|-------------------|
| 1. I feel frustrated by the individualized instructional situation. | SD | D | U | A | SA |
| 2. I dislike being taught by the individual method of instruction. | SD | D | U | A | SA |
| 3. Individualized assignments encourage students to do less work than do traditional classroom assignments. | SD | D | U | A | SA |
| 4. Individualized learning should result in a better education for most students. | SD | D | U | A | SA |
| 5. I usually feel uncertain as to my performance in individualized instruction. | SD | D | U | A | SA |
| 6. Students may learn less with individualized instruction if they are given the option to choose "what" and "how much" they study. | SD | D | U | A | SA |
| 7. Most of the material presented in individualized instruction is of much value to me. | SD | D | U | A | SA |
| 8. I feel that no one really cares whether I work or not in individualized instruction. | SD | D | U | A | SA |
| 9. I receive more individual help in individualized courses than in nonindividualized courses. | SD | D | U | A | SA |
| 10. I would like more instruction presented by the individualized instructional method. | SD | D | U | A | SA |
| 11. I have difficulty reading the written material used in individualized instruction. | SD | D | U | A | SA |
| 12. I feel that I am more involved with using equipment than with understanding the material in individualized instruction. | SD | D | U | A | SA |
| 13. A lot of cheating takes place in individualized instruction. | SD | D | U | A | SA |
| 14. Through individualized learning, the teacher has more time to give to the individual needs of the students. | SD | D | U | A | SA |
| 15. Individualized instruction makes me feel isolated and alone. | SD | D | U | A | SA |

CIRCLE YOUR RESPONSE

| | Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|---|----------------------|----------|-----------|-------|-------------------|
| 16. While taking individualized instruction, I feel challenged to do my best work. | SD | D | U | A | SA |
| 17. I become easily discouraged with the individualized type of instruction. | SD | D | U | A | SA |
| 18. I want to work harder when taking individualized instruction. | SD | D | U | A | SA |
| 19. There is usually enough time to learn the materials that are presented in individualized instruction. | SD | D | U | A | SA |
| 20. In individualized instruction, the material makes me feel at ease. | SD | D | U | A | SA |
| 21. Individualized instruction makes learning too mechanical. | SD | D | U | A | SA |
| 22. It is enjoyable to study subjects on one's own. | SD | D | U | A | SA |
| 23. Teacher help is not always available in individualized instruction. | SD | D | U | A | SA |
| 24. Individualized instruction makes me feel that I want to do my best work. | SD | D | U | A | SA |
| 25. Students should achieve a better understanding of the subject via individualized instruction. | SD | D | U | A | SA |

TRADITIONAL INSTRUCTION

| | | | | | |
|--|----|---|---|---|----|
| 1. Students should achieve a better understanding of the subject with traditional instruction. | SD | D | U | A | SA |
| 2. I usually perform better when I attend group instruction and compete with fellow students. | SD | D | U | A | SA |
| 3. The traditional method of instruction makes me want to work harder. | SD | D | U | A | SA |
| 4. I have difficulty reading the material used in traditional instruction. | SD | D | U | A | SA |
| 5. Traditional assignments encourage students to do more work than do individualized assignments. | SD | D | U | A | SA |
| 6. Very little of the material which I learn in traditional instruction can be applied to a practical situation. | SD | D | U | A | SA |

CIRCLE YOUR RESPONSE

| | Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|--|----------------------|----------|-----------|-------|-------------------|
| 7. A lot of cheating takes place with traditional instruction. | SD | D | U | A | SA |
| 8. In traditional instruction, I find that teacher help is almost always available. | SD | D | U | A | SA |
| 9. I become easily discouraged with the traditional form of instruction. | SD | D | U | A | SA |
| 10. I dislike being taught by the traditional instructional method. | SD | D | U | A | SA |
| 11. In the traditional classroom I feel that I am always certain of my performance. | SD | D | U | A | SA |
| 12. In the traditional classroom situation I feel I am more involved with understanding material than wasting my time using equipment. | SD | D | U | A | SA |
| 13. While taking traditional instruction, I feel challenged to do my best work. | SD | D | U | A | SA |
| 14. I usually feel frustrated by the traditional instructional situation. | SD | D | U | A | SA |
| 15. The material presented in traditional instruction is not of much value to me. | SD | D | U | A | SA |
| 16. I feel that I receive more individual help in traditional courses than in individualized courses. | SD | D | U | A | SA |
| 17. While taking traditional instruction I feel very uneasy. | SD | D | U | A | SA |
| 18. It is more enjoyable to study subjects in a large group than on one's own. | SD | D | U | A | SA |
| 19. In traditional instruction I feel that no one really cares whether I work or not. | SD | D | U | A | SA |
| 20. In view of the time allowed for learning in traditional instruction, I feel that too much material is presented. | SD | D | U | A | SA |
| 21. Traditional instruction is very boring. | SD | D | U | A | SA |

CIRCLE YOUR RESPONSE

| | Strongly Disagree | Disagree | Uncertain | Agree | Strongly Agree |
|--|----------------------|----------|-----------|-------|-------------------|
| 22. One will work harder if he is studying a subject with a large group. | SD | D | U | A | SA |
| 23. Traditional instruction, I feel, is a very poor way to learn the materials. | SD | D | U | A | SA |
| 24. While taking traditional instruction, I feel that I want to do my best work. | SD | D | U | A | SA |
| 25. Traditional learning should result in a better education for most students. | SD | D | U | A | SA |

APPENDIX B
LISTING OF THE CLASSES SURVEYED

| Time/Day | Course | Teacher | No. of Students | Room No. |
|---|--|------------------|-----------------|------------|
| 7:30 - 10:20 12:30 - 4:20 Th F | Auto Body Lab II | Egge | 12 | 519 |
| 11:30 - 12:20 M W F 10:30 - 12:20 T 9:30 - 11:20 Th | Secretarial Science II | Gibson | 17 | 205 |
| 8:30 - 11:20 T Th | Home Furnishings Assistant Backgrounds | Gold | 5 | 110 |
| 8:30 - 9:20 M T W Th F | Transcribing Machines | Grove | 14 | 203 |
| 7:30 - 12:20 M T W F 7:30 - 11:20 Th | Mechanical Drafting | Gustafson | 10 | 112 |
| 9:30 - 10:20 Th | Food Prep. Asst. II Prep. & Serv. Quant. | Hantelmann | 9 | 122 |
| 8:30 - 12:20 M T W F 8:30 - 11:20 Th 12:30 - 1:20 Th | Ag. Mechanics Engines Lab Ag. Mechanics Tractor Lab | McNett Boebel | | 413 413 |
| 1:30 - 2:20 Th | Welding Theory II | Nelson | 6 | 522 |
| 7:30 - 10:20 M T W Th F | Building Practice II | Pasch | 16 | 505 |
| 11:30 - 4:20 M 7:30 - 11:20 12:30 - 4:20 T 7:30 - 10:20 W | Auto Body Lab II | Schindler | 15 | 519 |
| All Day M T W Th F | Open Lab AVT Typing | Schleicher | 18 | 212 |
| 1:30 - 2:20 T W Th F | Business Machines II | Schneiter | 11 | 208 |

APPENDIX C

SURVEY SCHEDULE

| | Monday March 11 | Tuesday March 12 | Wednesday March 13 | Thursday March 14 | Friday March 15 |
|------------------|--------------------|---------------------------------------|-----------------------------------|--|--------------------|
| 7:30 - 8:20 | | | | | |
| 8:30 - 9:20 | | Sec. Science II Room 205 Gibson | Trans. Mach. Room 203 Grove | | |
| 9:30 - 10:20 | | | | | |
| 10:30 - 11:20 | | | | | |
| 11:30 - 12:20 | | | | | |
| 12:30 - 1:20 | | | | | |
| 1:30 - 2:20 | | | | Bus. Mach. II Room 208 Schneider | |
| 2:30 - 3:20 | | | | | |
| 3:30 - 4:20 | | | | | |

Schleicher - Open Lab - Surveys were given Mon. - Fri., March 11 - March 15, 7:30-4:20

SURVEY SCHEDULE

| | Monday March 18 | Tuesday March 19 | Wednesday March 20 | Thursday March 21 | Friday March 22 |
|------------------|--|---------------------|---|---|--------------------|
| 7:30 - 8:20 | | | Mech. Drafting Room 112 Gustafson | | |
| 8:30 - 9:20 | Ag. Mech. Room 413 Engines Lab-McNett Tractor Lab-Boebel | | | Auto Body Lab II-Egge Room 519 | |
| 9:30 - 10:20 | | | | | |
| 10:30 - 11:20 | | | | | |
| 11:30 - 12:20 | | | | | |
| 12:30 - 1:20 | | | | | |
| 1:30 - 2:20 | | | | Welding Theory II-Nelson Room 522 | |
| 2:30 - 3:20 | Auto Body Lab II Room 519 Schindler | | | | |
| 3:30 - 4:20 | | | | | |

SURVEY SCHEDULE

| | Monday March 25 | Tuesday March 26 | Wednesday March 27 | Thursday March 28 | Friday March 29 |
|------------------|--|---------------------|-----------------------|--|--------------------|
| 7:30- 8:20 | | | | | |
| 8:30 - 9:20 | Buildings Prac. II - Pasch Room 505. | | | Home Furn. Asst. Backgrounds-Gold Room 110 | |
| 9:30 - 10:20 | | | | Food Prep Asst. II Prep & Serv Quant. Room 122 Hantelmann | |
| 10:30 - 11:20 | | | | | |
| 11:30 - 12:20 | | | | | |
| 12:30 - 1:20 | | | | | |
| 1:30 - 2:20 | | | | | |
| 2:30 - 3:20 | | | | | |
| 3:30 - 4:20 | | | | | |

APPENDIX D

INTRODUCTION TO STUDENT SURVEY

Dear Students,

The purpose of this survey is to identify your preferred learning style, to determine what type of instruction is best for you.

You are now taking a class which is individualized in some form. At Southwest Wisconsin Vocational-Technical Institute individualized instruction is used in the following forms:

1. Student to teacher on a one to one basis in a lab situation with the use of a text.
2. Packaged, completely programmed instruction, where the student works at his own pace in an open lab using a programmed textbook.
3. Combination of the first two. The student works at his own pace using a programmed text in a lab with the assistance of the instructor.
4. The student may meet with his instructor on a one to one basis using a student performance evaluation form.

When you read the statements in the survey about individualized instruction think about the individualized class you are now taking and mark your responses according to this class.

Another section of the survey is concerned with traditional instruction. This type of instruction is characterized by the discussion - lecture classroom situation. When you respond to these statements think about the discussion - lecture classes you have had.